CLAIMS

I claim

1. A weight reduction composition, wherein the improvement comprises at least one of the substances selected from the group consisting of synephrine, hordenine, octopamine, tyramine and N-methyltyramine.

2. The composition of claim 1, wherein the composition is present in an amount of about 1-2000 mg.

3. The composition of claim 1, wherein the composition is present in an amount of about 10-1000 mg.

4. The composition of claim 1, wherein the composition is present in an amount of about 100 mg.

5. The composition of claim 1, wherein the synephrine content is 50% to 100% of substances selected from the group.

6. The composition of claim 5, wherein the synephrine is present in an amount of about 1 to 500 mg.

7. The weight reduction composition according to claim 1, wherein the composition is in the form of a tablet, capsule, sustained release formulation, or powder.

8. The composition of claim 1, further comprising a pharmaceutically acceptable carrier or diluent.

9. The composition of claim 1, wherein said composition is in a tea.

10. The composition of claim 1, wherein said human is overweight or obese.

11. The composition of claim 1, further comprising calorically restricting said human during said administering step.

12. An improved composition of a material derived from Citrus species and varieties of plants to cause weight loss and control body weight, wherein said material comprises at least

one of the substances selected from the group consisting of synephrine, hordenine, octopamine, tyramine and N-methyltyramine.

13. The composition of claim 12, wherein the material is in a fresh state, a dried state, a concentrated liquid form or a concentrated powder form.

14. The composition according to claim 12 wherein said material is the whole fruit of at least one of the plant species Citrus aurantium or Citrus reticulata in a fresh state, a dried state, a concentrated liquid extract, or a concentrated powder extract.

15. The composition according to claim 12 wherein the material is the peel of the fruit of at least one of the plant species Citrus aurantium or Citrus reticulata in a fresh state, a dried state, a concentrated liquid extract, or a concentrated powder extract.

16. The composition according to claim 12 wherein the material comprises the leaves of at least one of the plant species Citrus aurantium or Citrus reticulata in a fresh state, a dried state, a concentrated liquid extract, or a concentrated powder extract.

17. A physical performance enhancing composition wherein the improvement comprises at least one of the substances selected from the group consisting of synephrine, hordenine, octopamine, tyramine and N-methyltyramine.

18. The composition according to claim 17 wherein the substances are contained in material from Citrus species and varieties of plants.

19. The composition according to claim 17 wherein the material is in a fresh state, a dried state, a concentrated liquid form or a concentrated powder form.

20. The composition according to claim 17 wherein said material is whole fruit of at least one of the plant species Citrus aurantium or Citrus reticulata in a fresh state, a dried state, a concentrated liquid extract, or a concentrated powder extract.

21. The composition according to claim 17 wherein the material is the peel of the fruit of at

least one of the plant species Citrus aurantium or Citrus reticulata in a fresh state, a dried state, a concentrated liquid extract, or a concentrated powder extract.

22. The composition according to claim 17 wherein the material comprises the leaves of at least one of the plant species Citrus aurantium or Citrus reticulata in a fresh state, a dried state, a concentrated liquid extract, or a concentrated powder extract.

23. The physical performance enhancing composition according to claim 17 wherein the amount of the substances is from 1 to 500 mg

24. The composition of claim 23, wherein the synephrine content is 50% to 100% of the substances selected from the group.

25. The composition of claim 17, wherein the synephrine is present in an amount of about 1 to 500 mg.

26. The weight reduction composition according to claim 17, wherein the composition is in the form of a tablet, capsule, sustained release formulation, or powder.

27. The composition of claim 26, further comprising a pharmaceutically acceptable carrier or diluent.

28. A composition of a material to increase muscle mass wherein the improvement comprises at least one of the substances selected from the group consisting of synephrine, hordenine, octopamine, tyramine and N-methyltyramine.

29. The composition according to claim 28 which further comprises Citrus plant material.

30. The composition according to claim 29 wherein the material is in a fresh state, a dried state, a concentrated liquid form or a concentrated powder form.

31. The composition according to claim 29 wherein said material is whole fruit of at least one of the plant species Citrus aurantium or Citrus reticulata in a fresh state, a dried state, a concentrated liquid extract, or a concentrated powder extract.

32. The composition according to claim 29 wherein the material is the peel of the fruit of at least one of the plant species Citrus aurantium or Citrus reticulata in a fresh state, a dried state, a concentrated liquid extract, or a concentrated powder extract.

33. The composition according to claim 29 wherein the material comprises the leaves of at least one of the plant species Citrus aurantium or Citrus reticulata in a fresh state, a dried state, a concentrated liquid extract, or a concentrated powder extract.

34. The composition according to claim 29 wherein the composition is in the form of a tablet, capsule, sustained release formulation, tea, or powder.

35. The composition according to claim 28 wherein the composition is in an amount of from 1 to 200 mg.

36. The composition of claim 28, wherein said synephrine is in a concentration of 50% to 100% weight by volume of substances selected.

37. The composition of claim 28, further comprising a pharmaceutically acceptable carrier or diluent.

38. The composition of claim 28, wherein the synephrine is present in an amount of about 1 to 200 mg.

39. The composition of claim 28, wherein the composition amount is about 4-2000 mg.

40. The composition of claim 28, wherein the composition is present in an amount of about 10-1000 mg.

41. The composition of claim 28, wherein the composition is present in an amount of about 100 mg.

42. The composition of claim 28, wherein said human is overweight or obese.

43. The composition of claim 28, further comprising a high protein diet to said human during said administering step.

44. A method for stimulating thermogenesis in humans wherein the improvement comprises

administering by mouth to a subject at least one of the substances selected from the group consisting of synephrine, hordenine, octopamine, tyramine and N-methyltyramine in therapeutically effective amounts.

45. The method according to claim 44 further comprising plant material containing at least one of said substances.

46. The method according to claim 45 wherein the amount of the substances is about three to four percent by weight which is effective to increase the metabolic rate of the subject without inducing increased caloric intake.

47. The method according to claim 44 wherein the dosage is at least 0.02 mg per kg of ideal weight which is effective to increase the metabolic rate of the subject without inducing increased caloric intake.

48. A method of treatment for fostering weight reduction wherein the improvement comprises administering to a subject in need of the treatment a therapeutically effective amount of a weight reducing composition, comprising at least one of the substances selected from the group consisting of synephrine, hordenine, octopamine, tyramine and N-methyltyramine in a total daily dosage amount of 1 to 500 mg.

49. The method according the claim 48 wherein the weight reduction composition consists of plant material which contains at least one of the substances selected from the group consisting of synephrine, hordenine, octopamine, tyramine and N-methyltyramine.

50. The method according to claim 48 wherein the amount of substance from said group is about 0.02 to 0.10 mg of per kg of ideal weight.

51. The method of claim 48 wherein the subject is on a hypocaloric diet.

52. A method for reducing the weight of a human, wherein the improvement comprises administering to the human a thermogenically effective dose of at least one of the substances selected from the group consisting of synephrine, hordenine, octopamine, tyramine and

N-methyltyramine.

53. A method for reducing the adipose tissue mass/lean mass body mass ratio of a human, wherein the improvement comprises administering to the human a thermogenically effective dose of at least one of the substances selected from the group consisting of synephrine, hordenine, octopamine, tyramine and N-methyltyramine.

54. A method for increasing the muscle mass of a human, comprising administering to the human a thermogenically effective dose of a composition further comprising at least one of the substances selected from the group consisting of synephrine, hordenine, octopamine, tyramine and N-methyltyramine.

55. The method according to claim 54 wherein the total daily dosage is about 500 mg.

56. The method of claim 54 wherein the subject is on a high protein diet.

57. A method of treatment for fostering improved physical performance wherein the improvement comprises administering to a subject in need of the treatment an efficacious amount of a composition comprising at least one of the substances selected from the group consisting of synephrine, hordenine, octopamine, tyramine and N-methyltyramine.

58. The method according to claim 57 wherein the dose administered to the human is thermogenically effective.

59. The method according to claim 57, wherein about 4 to 2000 mg/day are administered.

60. The method according to claim 57, wherein about 10 to 1000 mg/day are administered.

61. The method according to claim 57, wherein about 100 mg/day are administered.

62. The method according to claim 57, wherein said composition is in a tea.

63. The method according to claim 57, wherein said human is overweight or obese.

64. The method according to claim 57, wherein the subject is on a high protein diet.